

**EPA Superfund
Explanation of Significant Differences:**

**CHEMICAL SALES CO.
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OU 02
DENVER, CO
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Text:

EXPLANATION OF SIGNIFICANT DIFFERENCE (ESD)

Chemical Sales Company Superfund Site
Operable Unit 2

OVERVIEW

The purpose of this document is to explain the significant differences between the remedy chosen in the U.S. Environmental Protection Agency (EPA) Record of Decision (ROD), signed June 27, 1991, and the remedy which will be implemented at the Chemical Sales Company (CSC) Superfund Site (Site), Operable Unit 2 (OU2), located in Commerce, Colorado. EPA is in the role of lead agency while the Colorado Department of Public Health and Environment (CDPHE) is in the role of support agency.

This ESD provides a brief background on the Site, describes the original remedy selected in the ROD, and explains the ways in which the modified remedy differs from the original. It also provides a summary of the support agency's comments on the changes to the remedy, discusses the modified remedy's compliance with all legal requirements, and provides details with respect to obtaining more information or submitting comments concerning the modified remedy.

This document is prepared in fulfillment of EPA's public participation responsibilities under Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) and Section 300.435(c)(2)(i) of the National Contingency Plan (NCP). It presents only a summary of the changes to the remedy and a synopsis of information on the Site. It will become part of the Administrative Record File (NCP 300.825(a)(2)), which is available for public review at the following location:

Environmental Protection Agency
999 18th Street, suite 500
Denver, CO 80202

8th Floor, North Tower
Hours: Monday-Friday, 8:00 a.m. - 4:30 p.m.
(303) 294-7691

SITE HISTORY AND BACKGROUND

The Chemical Sales Company Superfund Site OU2 is located in south Adams County and includes and addresses ground water contamination north of Sand Creek. It is approximately bounded by Holly Street to the west; Sand Creek to the south; Quebec to the east; and 88th Avenue East, to the north. Please see the attached map.

In 1981, BPA conducted a random national survey of drinking water systems. During this survey, several organic chemical were detected in SACWSD alluvial municipal water supply wells, and additional sampling confirmed these results. In December, 1986, an RI/FS was completed, which indicated widespread contamination by chlorinated volatile organic compounds in ground water along the eastern portion of "Off-Post Rocky Mountain Arsenal (RMA) OU1" (Off-Post RMA OU1). The select remedy was a permanent water treatment system for SACWSD water. The Klein Water Treatment Facility (KWTF) was constructed and began opening in October, 1989, and approximately 400 residents within the CSC OU2 site were connected to SACWSD.

In April, 1986, a soil gas survey, and elevated trichloroethylene (TCE) values were discovered in the northern portion of the CSC property in OUT. In August, 1986, EPA installed monitoring wells in the area where TCE was observed, which were sampled in late August and early September, 1986. The results of these studies indicated the release of hazardous substances into ground water from the CSC property. EPA then proposed the CSC site for the National Priorities List (NPL) in Jnne, 1988. This listing was finalized in August 1990.

OU2 remedial design activities at the Site began in February, 1992. In the course of conducting these activities, EPA has obtained new information which has resulted in the need for this ESD.

SUMMARY OF THE 1991 RECORD OF DECISION

The objective of the remedy selected in the ROD is to prevent migration of contaminated ground water in OU2 and to restore chemical concentrations in ground water in OU2 to acceptable levels for indoor use (i.e., drinking and showering) based on federal and State drinking water standards. The action described addresses ground water only.

The major components of the selected remedy include:

- * Extraction of contaminated ground water within the PCE plume;
- * Treatment of the ground water by air stripping technology;
- * Re-injection of the treated ground water by injection wells;
- * Monitoring of ground water;
- * Continued capture and treatment of PCE and TCE - contaminated ground water by the existing Klein Water Treatment Plant; and
- * Voluntary abandonment of bedrock wells.

DESCRIPTION OF SIGNIFICANT DIFFERENCE

As stated above, the original remedy called for the pumping of two plumes of contaminated ground water. The PCE plume, originating near 56th and Quebec, was going to require active treatment by air stripping, and reinjection of the treated water into the aquifer. In light of new information, EPA and CDPHE are proposing to alleviate this component of the remedy due to dispersion of the high concentrations of PCE that the system was envisioned to treat.

Thus, the first three above bulleted components of the remedy will be eliminated. The residual plume (TCE) will continue to be captured by the SACWSD system. A ground water monitoring system will be installed and a monitoring program implemented by CDPHE. The purpose of this monitoring system will be to provide information that can be used to evaluate the effectiveness of the remedial action.

The sampling information used to determine that the PCE pump-and-treat system is no longer necessary is located in the Chemical Sales OU2 Remedial Design Report. This report can be reviewed at the EPA Superfund Records Center, located at the address listed above.

SUPPORT AGENCY COMMENTS

The Colorado Department of Public Health and Environment (CDPHE) concurs with this document. CDPHE also stated that if the contamination should present a threat to either human health or the environment in the future, based upon the monitoring mentioned in this document, action will be taken by the agencies to address the threat.

STATUTORY DETERMINATIONS

Considering the new information that has been developed and the changes which have been made to the selected remedy, EPA and the State believe that the remedy remains protective of human health and the environment, complies with federal and state requirements that are applicable or relevant and appropriate to this remedial action, and is cost effective. In addition, the revised remedy utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable for this Site.

PUBLIC PARTICIPATION ACTIVITIES

This ESD will become part of the Administrative Record File pursuant to Section 300.825(a)(2) of the NCP. The Administrative Record File is available for public review at the following

location:

EPA Superfund Records Center
999 18th Street, Suite 800
Denver, Colorado 80202
(303) 294-7691

EXPLANATION OF SIGNIFICANT DIFFERENCES
RECORD OF DECISION (ROD) - OPERABLE UNIT II
CHEMICAL SALES COMPANY SUPERFUND SITE

DECLARATION

Considering the new information that has been developed and the changes that have been made to the remedy selected in the June 1991 ROD, EPA has determined that the remedy remains protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant or appropriate to this remedial action and is cost-effective. In addition, the revised remedy utilized permanent solutions and alternative treatment technologies to the extent practicable.

Robert L. Duprey, Director
Hazardous Waste Management Division

Date